

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 **Claim 1 (Currently Amended):** A multisystematic
2 volume rendering image processing system comprising:
3 a plurality of image data ~~processing units~~server
4 computers,
5 a plurality of image display units,
6 one or more common volume data storage [[unit]]units
7 for storing volume data necessary for the image display
8 units, and
9 a ~~computation~~server manager for managing data
10 copying via a network, wherein the image data server
11 computers~~processing units~~ receive volume data necessary
12 for formation of images requested by the image display
13 units from the volume data storage unit via the network,
14 process image data in accordance with image requests
15 concerning angle and position issued from the image
16 display units, and transmit image results to the image
17 display units via the network;
18 the image display units each including an input
19 section and an output section transmit the image requests
20 entered through the input sections to the image data
21 server computers~~processing units~~via the network, receive

22 the image results processed by the image data server
23 ~~computersprocessing units~~ and output the image results to
24 the output sections;

25 the volume data storage unit transmits the necessary
26 volume data to the image data server computersprocessing
27 ~~units~~ in accordance with requests issued from the image
28 data server computersprocessing units; and

29 the ~~computation~~ server manager makes a decision to
30 switch data processing for the plurality of image display
31 units so that a part of the data processing performed by
32 an operative one of the image data server
33 ~~computersprocessing units~~ will be replaced by data
34 processing performed by another suspended one including a
35 state of low load of the image data server
36 ~~computersprocessing units~~.

1 **Claim 2 (Currently Amended):** The multisystematic
2 volume rendering image processing system as claimed in
3 claim 1, wherein when the ~~computation~~ server manager
4 decides the switching, if the same volume data as the
5 volume data handled by the operative image data server
6 computerprocessing unit are not present in the suspended
7 image data server computerprocessing unit as a
8 destination of the decided switching, the ~~computation~~

9 server manager performs ~~controlling to transmit~~ a control
10 function wherein the volume data from the volume data
11 storage unit is transmitted to the destination image data
12 server computer~~processing unit~~ and ~~copy~~ additional
13 information is copied from the operative image data
14 server computer~~processing unit~~ to the destination image
15 data server computer~~processing unit~~, and ~~makes~~ the
16 destination image data server computer is made
17 toprocessing unit execute the data processing.

1 **Claim 3 (Currently Amended):** The multisystematic
2 volume rendering image processing system as claimed in
3 claim 1, wherein when overload is imposed on computation
4 of volume rendering which is being carried out by a first
5 image data server computer~~processing unit~~, the
6 ~~computation~~-server manager judges whether to make a part
7 of the volume rendering be handed over to a second image
8 data server computer~~processing unit~~ having idle
9 computation resources or not; and

10 when a decision is made that the part of the volume
11 rendering is handed over, the ~~computation~~-server manager
12 performs ~~controlling to transmit~~ a control function
13 wherein volume data handled by the first image data
14 server computer is transmitted~~processing unit~~ from the

15 volume data storage unit to the second image data server
16 ~~computerprocessing unit~~ and ~~copy~~ additional information
17 is copied from the first image data server
18 ~~computerprocessing unit~~ to the second image data server
19 ~~computerprocessing unit~~, and ~~makes~~ the second image data
20 server computer is made to~~processing unit~~ execute the
21 data processing which is heretofore executed by the first
22 image data server computerprocessing unit.

1 **Claim 4 (Currently Amended):** The multisystematic
2 volume rendering image processing system as claimed in
3 claim 1, wherein the ~~computation-server~~ manager stores
4 identification names of the volume data transmitted from
5 the volume data storage unit and destination image data
6 server computersprocessing units in a memory in advance;
7 when the volume data storage unit is requested to
8 send volume data, the ~~computation-server~~ manager inquires
9 of the memory whether the same volume data are already
10 sent or not, after the volume data is sent from the
11 volume data storage unit;
12 when the same volume data are already sent, the
13 ~~computation-server~~ manager judges whether the volume data
14 are collected to one of the image data server
15 computersprocessing units or not; and

16 when a decision is made that the volume data are
17 collected to one of the image data server
18 ~~computersprocessing units~~, the ~~computation~~-server manager
19 performs ~~controlling to copy~~a control function wherein
20 additional information is copied from ~~[[a]]an image~~ data
21 ~~server computerprocessing unit~~ to be suspended to another
22 image data server computerprocessing unit as a
23 destination of handover of the volume data and~~make~~ the
24 handover destination image data server computer is made
25 ~~toprocessing unit~~ execute data processing which is
26 heretofore executed by the image data server
27 ~~computerprocessing unit~~ to be suspended.

1 **Claim 5 (Canceled)**